

BIOGRAPHICAL SKETCH – Jana B. Milford
Professor of Mechanical Engineering, University of Colorado at Boulder

A. Education/Training

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
Iowa State University, Ames, IA	B.S.	1983	Engineering Science
Carnegie Mellon University, Pittsburgh, PA	M.S. Ph.D.	1985 1988	Civil Engineering Engineering & Public Policy
University of Colorado, Boulder, CO	J.D.	2004	Law

B. Appointments

1987-1989. Congressional Fellow and Analyst, Office of Technology Assessment, United States Congress, Washington, DC.

1989-1993. Assistant Professor, Department of Civil Engineering and Environmental Research Institute, University of Connecticut, Storrs, CT.

1994-1997. Assistant Professor, Department of Mechanical Engineering, University of Colorado, Boulder, CO.

1997-2008. Associate Professor, Mechanical Engineering, University of Colorado, Boulder, CO, Aug. 1997 – present. Half-time Sept. 2003 – Jan. 2007. Resumed full-time in Jan. 2007.

1998-2001; 2010 – present. Director, Environmental Engineering Program, University of Colorado, Boulder.

2004-2007. Senior Scientist and Staff Attorney, Environmental Defense, Boulder, CO, half-time.

2008-present. Professor, Department of Mechanical Engineering, University of Colorado, Boulder, CO.

C. Selected Publications

Brinkman, G.L., Denholm, P., Hannigan, M.P., Milford, J.B., “Effects of Plug-in Hybrid Electric Vehicles on Ozone Concentrations in Colorado,” *Environ. Sci. Technol.*, 44:6256-6262, 2010.

Dutton, S.J., Vedal, S., Piedrahita, R., Milford, J.B., Miller, S.L., Hannigan, M.P., “Source Apportionment Using Positive Matrix Factorization on Daily Measurements of Inorganic and Organic Speciated PM_{2.5},” *Atmos. Environ.*, 44:2731-2741, 2010.

Trenbath, K., Hannigan, M.P., Milford, J.B. “Evaluation of Retrofit Crankcase Ventilation Controls and Diesel Oxidation Catalysts for Reducing Air Pollution in School Buses,” *Atmos. Environ.*, 43:5916-5922, 2009.

Milford, J.B., Pienciak, A. "After the Clean Air Mercury Rule: Prospects for Reducing Mercury Emissions from Coal-Fired Power Plants," *Environ. Sci. Technol.*, 43:2669-2673, 2009.

Vedal, S., Hannigan, M.P., Dutton, S.J., Miller, S.L., Milford, J.B., Rabinovitch, N., Kim, S.-Y., Sheppard, L. “The Denver Aerosol Sources and Health (DASH) Study: Overview and Early Findings,” *Atmos. Environ.*, 43:1666-1673, 2009.

- Sakulyanontvittaya, T., Guenther, A., Helmig, D., Milford, J., Wiedinmyer, C. "Secondary Organic Aerosol from Sesquiterpene and Monoterpene Emissions in the United States," *Environ. Sci. Technol.*, **42**:8784-8790, doi: 10.1021/es800817r, 2008.
- Sakulyanontvittaya, T., Duhl, T., Wiedinmyer, C., Helmig, D., Matsunaga, S., Potosnak, M., Milford, J.B., Guenther, A., "Monoterpene and Sesquiterpene Emission Estimates for the United States," *Environ. Sci. Technol.*, **42**:1623-1629, doi 10.1021/es702274e, 2008.
- Brinkman, G., Vance, G., Hannigan, M., Milford, J.B., "Use of Synthetic Data to Evaluate Positive Matrix Factorization as a Source Apportionment Tool for PM_{2.5} Exposure Data," *Environ. Sci. Technol.*, **40**:1892-1901, 2006.
- Henderson, D., Milford, J.B., Miller, S.L., "Prescribed Burns and Wildfires in Colorado: Impacts of Mitigation Measures on Indoor Air Particulate Matter," *J. Air & Waste Manage. Assoc.*, **55**:1516-1526, 2005.
- Ramaswami, A., Milford, J.B., Small, M.S., *Integrated Environmental Modeling: Pollutant Transport, Fate and Risk in the Environment*, John Wiley and Sons, 2005, 678 pp.
- Miller, S.L., Anderson, M.J., Daly, E.P., Milford, J.B., "Source Apportionment of Exposures to Volatile Organic Compounds, I. Evaluation of Receptor Models Using Simulated Exposure Data," *Atmos. Environ.*, **36**:3629-3641, 2002.
- Anderson, M.J., Daly, E.P., Miller, S.L., Milford, J.B. "Source Apportionment of Exposures to Volatile Organic Compounds, II. Application of Receptor Models to TEAM Study Data," *Atmos. Environ.*, **36**:3643-3658, 2002.
- Anderson, M., Miller, S.L., Milford, J.B., "Source Apportionment of Exposure to Toxic Volatile Organic Compounds Using Positive Matrix Factorization," *Int. J. Exp. Anal. Environ. Epi.*, **11**:295-307, 2001.

D. Awards

- Outstanding Service Award, Mechanical Engineering, University of Colorado, Fall 2010.
- Health and Environmental Stewardship Award, presented by the Colorado Air Pollution Control Division, September 2008.
- Faculty Leadership Advancement Group, College of Engineering and Applied Science, University of Colorado, 2006.
- Distinguished Achievement Award, Mechanical Engineering, University of Colorado, 2004-05.
- University of Colorado, Emerging Leaders Program, 2002-2003.
- Max S. Peters Faculty Service Award, College of Engineering and Applied Science, University of Colorado, 2001.

E. Synergistic Activities

- National Academy of Sciences, Board of Environmental Studies and Toxicology, Jan. 2010 - .
- National Academy of Engineering, Chinese Academy of Sciences and Chinese Academy of Engineering, Committee on U.S.-Chinese Cooperation on Electricity from Renewable Resources, 2008-2010.
- Regional Air Quality Council, Board Member, 2007 - 2009.
- U.S. Environmental Protection Agency, Science Advisory Board, Dec. 2005 - .
- National Academy of Engineering, Committee on Energy Futures and Air Pollution in Urban China and the United States, 2005 - 2007.
- National Academy of Sciences, Committee on Air Quality Management in the United States, member, May 2001 - 2004.
- Colorado Air Quality Control Commission, 1994 - 1997.